

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No.: 10/800,580

Confirmation No.: 1657

Applicant/
Appellant: Kenji Inoue

Filed: March 15, 2004

TC/A.U.: 1794

Examiner: Elizabeth M. Cole

Customer No.: 00270

Title: Wet Paper Web Transfer Belt

REPLY BRIEF

MAIL STOP Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief is in response to the Examiner's Answer dated July 2, 2009 responding to the Appeal Brief filed April 28, 2009. The appeal is from the final rejection of claims 1 and 5 in the Office Action dated October 31, 2008.

Application No. 10/800,580

Reply Brief

September 1, 2009

No fee is believed due with this paper. The Director is hereby authorized to charge any deficiency in the fee due with the filing of this paper, or credit any overpayment, to our Deposit Account, No. 08-3040.

Status of Claims

The pending claims are claims 1 and 5. Claims 1 and 5 (all pending claims) are rejected and are the subject of this appeal.

Claim 1 (Rejected)

Claims 2-4 (Canceled)

Claim 5 (Rejected)

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Reply Brief

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Grounds of Rejection to be Reviewed on Appeal

The sole issue of appeal is whether or not the Examiner erred in rejecting claims 1 and 5 as unpatentable under 35 U.S.C. §102(b) over Hagfors et al¹.

¹ US Patent Publication No. 2002/0137416

Argument

The Examiner argues that, even if example 2 is in error, it still anticipates Applicant's invention and makes sense in the context of the reference which discloses employing different fiber fineness in order to achieve the desired result of having the web facing surface of the belt have areas with different surface properties.

The case law supports the Applicant's position that a disclosure must be interpreted in the manner in which it would be understood by one skilled in the art, and, if persons skilled in the art would understand that there was an error, the disclosure cannot be taken at face value. *In re Paulsen*, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994), *Edison Electric Light Company v. Novelty Incandescent Lamp Co.*, 167 F. 977 (3rd Cir. 1909)².

There is no dispute that Hagfors' example 2 is in error. The dispute concerns the nature of the error. The weight of the evidence, taking the declaration into account, supports the Applicant's position: Example 2 should be read as Applicant has argued (i.e., that the third type of fibers in Example 2 are **PE fibers**). If Example 2 is so read, it cannot anticipate Applicant's invention. Instant claim 1

² Both *Paulsen* and *Edison* were presented in the Evidence Appendix of the Appeal Brief filed April 28, 2009.

requires that “substantially all of the fibers exposed on said wet paper web side surface are hydrophilic”. A web composed of PA and PE fibers would have exposed hydrophilic and hydrophobic fibers.

The Examiner argues that it is not clear that there is an error because the dtex values of the two other groups of fibers are disclosed and, even if there is an error, it is not clear that the error is not in simply omitting the dtex of the third group of PA fibers.

The Examiner argues that her interpretation of error is more likely because, in Example 1, “the different areas having different surface properties are clearly disclosed as coming from the ‘hydrophobic PE areas and hydrophilic PA areas’”, while in Example 2, the resulting web facing surface is described as having a “micro-roughness provided by hydrophilic PA areas of various sizes and varying roughness, with polycarbonate urethane as the matrix.” The Examiner argues “if the disclosure of using all polyamide fibers was a mistake and the third fiber group was intended to be [a] hydrophobic fiber group which was required to form a hydrophobic region on the belt surface, it would seem that this discussion of the resulting surface would refer to such fibers.”

Each of the Examiner's arguments is based on the proposition that Hagfors is not limited to the use of a mixture of hydrophobic and hydrophilic fibers. The Examiner asserts that multiple different ways of producing a web having different areas which have different properties are disclosed, including the use of fibers with varying properties other than hydrophilicity/hydrophobicity (e.g., fineness). Applicant does not dispute that Hagfors discloses the use of fibers with differing properties such as fineness. However, Hagfors' disclosure requires that the transfer belt of the invention have three essential characteristics. First, the belt must be provided with hydrophilic and, correspondingly, hydrophobic areas (paragraph 7). Second, the belt surface is made of a fiber layer impregnated with a polymer and comprising at least two fibers having different surface properties (paragraph 8). Third, while the surface of the belt is ground to be suitably smooth, the fibers on the surface maintain a micro-roughness (paragraph 8). While the fibers may differ from each other in various ways, nothing about Hagfors suggests that the transfer belt resulting from the combination of fibers would have only hydrophilic/hydrophobic areas or only micro-roughness. On the contrary, each characteristic is described as "essential". Thus, any proposed embodiment of Hagfors invention which disregards one or more of these "essential" characteristics cannot stand.

The Examiner asserts that the likely error in Example 2 is that the dtex value of the third "PA" fiber is omitted. This interpretation disregards the first "essential characteristic" of Hagfors' transfer belt, i.e., that the belt have hydrophilic and, correspondingly, hydrophobic areas. A transfer belt which only has exposed PA fibers would only have a hydrophilic surface, due to the hydrophilic nature of the PA fibers. Neither Hagfors nor the Examiner explains how hydrophobic areas are formed if all of the fibers in the belt are made of the same hydrophilic material differing only in fineness. Without an explanation as to how a belt comprised of all hydrophilic fibers would have hydrophilic and, correspondingly, hydrophobic areas, the Examiner's proposed interpretation of Hagfors' example 2 cannot stand. The more likely interpretation is the one suggested Applicant and supported by Applicant's Declaration, i.e., the third "PA" fiber should be read as "PE".

Applicant's interpretation of the error in example 2 is further supported by other portions of Hagfors' specification. Hagfors states that the "micro-roughness" of the surface can be controlled by the roughness of the abrasive means (which grinds the surface) and the degree of fineness of the fibers. Hagfors describes how rougher fibers may be used in order to create a rougher surface, allowing the web to detach more easily from the belt. Thus, in the context of the entire specification, it is reasonable to conclude that the fiber fineness is varied in order to provide the

third essential characteristic of the invention, i.e., micro-roughness of the belt surface.

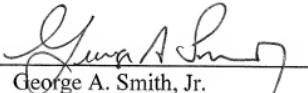
Without an explanation as to how hydrophilic and, correspondingly, hydrophobic areas are provided using only hydrophilic fibers, the Examiner's interpretation of Hagfors' example 2 is not consistent with the presence of all three "essential" characteristics of Hagfors' transfer belt. In other words, the varying roughness of the belt surface described in Hagfors' example 2 is an independent property of the belt. The belt still must have hydrophilic and hydrophobic areas, and the only way disclosed by Hagfors to achieve this property is to provide both hydrophilic and hydrophobic fibers.

Conclusion

For the reasons given above, we submit that the Examiner has improperly rejected claim 1 and its dependent claim 5, and respectfully request reversal of the rejection.

Respectfully submitted
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